MCQS

- One is not found (involve) in colorimetric:1- Cuvett2-light source3- Photo sensor and analyzer4-fule source5-Filter2.
- The atomic mass of an atom is the number of:1- Protons and neutrons2- Protons only3-Neutrons only4- Electrons5- Non of the above3.
- Deionization of impure water means:1- Boiling2- Filtration3- Exchange of protons and electrons4.
- If you see this sign (symbol) in the lab it means:1- Flammable2- Corrosive3- Oxidizing4- Explosive5-Toxic5.
- Most common method (technique) used to detect hormone amount in the laboratories:1-Spectrophotometry2- Enzyme Linked Immuno Surbant Assay (ELIZA)6.
- Test should be kept away from light:1- Serum bilirubin7.
- Buffer solution is:1- Chaing color when chaing pH2- Resist acidic pH3- Resist alkaline pH4- **Weak** acid + weak base5- Strong acid + weak base8.
- An indicator is:1- Change color with change pH 2- Resist acidic pH 3- Resist alkaline pH 4- Weak acid + weak base 5- Strong acid + weak base 9.
- Heparin is:1- Protein 2- Enzyme 3- Polysaccharide 4- Oligosaccharide
- Not find in the flam photometry: BurnerFilterFuel source, Cuvete for sample, Photo 11.
- Low effective sterilization with: Ethyl alcohol 70%, Methyl alcoholChloroform5%, phenol5% cresol12.
- Prolonged fast cause: Hyperglycemia, Keton in urine13.
- Lens near the slid in light microscope: Objective, Eye lenses14.
- Does not sterile with hot air oven: Dry glassware,Oil,Powder,Waxes,Rubber gloves15.
- Autoclave sterilize in temp: 121 c-20-30min16.
- Alkali skin burn treatment by neutralization with: Sodium bicarbonate powder, Boric acid, Acetic acid 1%, Cold water, Hot water 17.
- You do not take this stage for treatment small cut'ln emergency: Clean with soap and water, Do
 pressure with piece, Immediately rinse mouth well and water, Cover it with water dressing,
 Sterilize 18.
- the (u) unit used to evaluation of: Protein in serum, Hemoglobin, Hormone assay, **Enzymatic** activity19.
- During reaction of two chemical substances, the color produced asses by:
 Spectrophotometer, Flame photometer

- To detect pH from solution use: pH meter, Indicator, Micrometer 21.
- This Symbol means, when you see in laboratory: acute flammable, **Toxic**, Corrosive, Explosive 22.
- The microscope which used in investigate syphilis is?*light microscope*ultra-violet microscope*dark field microscope
- How much water should we add to 500ml of a solution of 10% of NAOH to bring it to 7.5%?*666*250*16624.
- Calibrator sera are?*secondary standards*internal standards*primary standards25.
- A buffer made of?*a strong acid + a strong salt*a weak acid + a weak salt*a weak acid + a strong salt26.
- The difference between plasma & serum is that plasma?*does not contain fibrinogen*has more water*contains fibrinogen (Plasma)27.
- Five ml of colored solution has an absorbance of .500nm the absorbance of 10ml of the same solution is?*1.000nm*0.250nm*0.500nm28.
- Plasma or serum should be separated at the earliest time for estimation of glucose because?*glucose value increases with time*lyses of blood will occur*glucose value decreases with time29.
- Wave Length Visible To Naked Eye:400-700 nm.
- Purpose of standard deviation :A-to measure external quality control B-to measure internal quality control C-precise & accuracy D-both a & b
- 31. Substance used in catalyse reaction: H₂O₂

haematology

- Neutrophil count is high in:1-Acute bacterial infection 2- Iron deficiency anemia3-Megaloblastic anemia2.
- HbA2 is consisting of:1-3 lpha chains and 2 γ chains, 2 lpha chains and 2 β chains, 2 lpha chains and 3 δ chains, 3 lpha chains and 2 δ chains
- The main (most) Hb found in adult is: HbA, HbA2, Hb F4.
- Detection of malaria parasite is by:1-Thick blood film5.
- Leukocyte that involve in Adaptive and Acquired immunity:1- Lymphocyte2- Neutrophil3-Monocyte4- Basophile5- Eosinophil6.
- Normal range of leukocyte is:1-4-11 X 10^97.
- Reticulocyte is immature: 1- RBC2- WBC3- Platelet8.
- Leukocyte responsible for cellular immunity:1- **T-lymphocyte2** B- lymphocyte3- Monocyte4-Basophile5- Eosinophil9.
 - Malaria infection transmitted by:1- Male anopheles mosquito2- Female anopheles mosquito10.

princey Stegle) activa X Factor

- One stage prothrombin time used to detect (diagnose) disorders in:1- Extrinsic coagulation pathway (factors)2- Intrinsic coagulation pathway (factors)11.
- Thrombin time is:1- Extrinsic coagulation pathway (factors)2- Intrinsic coagulation pathway (factors)3- The conversion of prothrombin to fibrinogen in addition of thrombin
- Most sever (serious) malaria infection caused by:1- **Plasmodium Falciparum**2- Plasmodium Malaria3- Plasmodium Ovale4- Plasmodium Vivax 5- All of the above 13.
- Leukocyte responsible for response to parasitic and allergic infection:1- Lymphocyte2-Nutrophile3- Monocyte4- Basophile5- Eosinophil14.
- With Romanowsky stain ,2-5 lobes and give violet or pinkish granules: Nutrophile, Eiosinophile, Basophile, Monocyte15.
- Lymphocyte is elevated in :<u>Viral infectionAcute</u>, bacterial infection, Iron deficiency anemia, Megaloblastic anemia, Non of the above16.
- Thrombin time measure: Convert fibrinogen to fibrin with activate of thrombin17.
- In presence of clotting defect one of this not measure: Leukocyte count18.
- Bleeding time test detect the abnormality in: **Defect in vessels and platelets19**.
- S hemoglobin is the same defect of thalassemia but the different is: Long B chain, Glutamic acid on B chain is substituted with valine, Glutamic acid on a chain is substitutes with valine20.
- Hormone that cause replication of RBC: Erythropoietin21.
- Which of White blood cell give immunoglobulin-Lymphocyte, Neutrophil, Basophile, Monocyte, Eosinophil22.
- Neutrophil is a common White blood cell present in blood and the percentage of presence is-90%,15%,75%
- Normal range of erythrocyte-4, 5-6,5X 10^9.
- One of these cell the largest leukocyte cell: Neutrophil, Basophil, Monocyte, Lymphocyte, Eosinophil25.
- Malaria chizonts are present in?*reticulo-endothelial *leukocyte*RBCs.

- Unidirectional movement of WBCs directly to its target is?*sliding*phagocytes*chemo taxis.
- Malaria does not grow in?*EDTA blood*heparin zed blood*Plasma28.
- Hemophilia man married to normal woman the incidence of his children is?*carrier male*diseased female*carrier female29.
- IVY method of bleeding time- For vascular and platelets abnormalities (function).
- NeutrophilMost abundant in WBCs31.
- HbA(Adult haemoglobin) for adult, dominant in adult32.
- HbF(Infant heamoglobin) fetal haemoglobin33.
- Neutrophil- Firstly increased in bacterial infections34.
- Prolonged application of tourniquet; Venous stasis-increased calcium level35.
- Best time for collection of blood for malaria :-A-before and after paroxsymB-shortly after paroxsymC-later paroxsymD-just before paroxsym36.
 - In folic acid deficiency what happens to rbcs :-A- Enlarged RBCs (Megaloblastic anemia) = MacrocyticB- Crenated RBCsC- Haemolyzed RBCs37.
 - In iron deficiency anaemia: RBCs are smaller than normal = Microcytic
 - The malarial sporozoite in man invades:-A-white blood cellsB-RBCs C-Reticulo-endothelial cellsD-all of the above
 - The defect of thalassemia occurs in:- Cycle of heme, Glubin chain All Cells Are Nucleated EXCEPT:-A-LYMPHB- MONOCYTES, RBC, NEUTROPHIL Romanowsky stain consists of:1- Eosin + Alkaline methylene blue2- Eosin only3- Methylene blue only4- Indian Ink.

BIOCHEMISTRY

- One is not correctly paired: α cells \rightarrow glucagon, β -cells \rightarrow insulin, Parathyroid \rightarrow calcium, Corpus luteum \rightarrow Progesterone, Estrogen \rightarrow seminiferous tubules.
- In case of obstructive jaundice one is commonly not found:1- Total bilirubin is elevated2- High bilirubin in urine3- Direct bilirubin is within the normal4- Dark color of urine5- Clay color of stool3.
- In case of Hemolytic jaundice one is not likely to be found:1-Total bilirubin is elevated2- High bilirubin in urine3- No change in color of urine4- Direct bilirubin is within the normal5- Normal color of stool4.

- One is not true about acid:1- Proton donor2- Turn litmus paper to blue3- Sour taste4- React with alkaline to give water and salt5- Non of the above5.
- Pentose phosphate metabolism cycle is important to the cell because it give: 1- Acetyl CoA2-ADP3- ATP4- NADH5- NADPH6.
- Hydrolysis of sucrose result:1- Only glucose2- Galactose3- Fructose + glucose4- Glucose + Glucose5- Maltose + Glucose7.
- Consider ketose: Glucose, Fructose, Mannose8.
- Presence one from this substance in urine detect abnormal condition; Calcium, Phosphates, Glucose, Urates 9.
- In cardiac infraction one of the measurements is not benefited: Creatinine.
- One of the following has highest conc. Of cholesterol: Chylomicron, LDL, HDL, VLDL, Apolipoprtein11.
- Hyper secretion of insulin cause: Hypoglycemia12.
- Hyperglycemia hormone- Glucagon 13.
- Pyrimidin base: Adenine, Guanine, Thymine, Uric acid, Urea14. Cytosine, Uracil
- One use for measure abnormality in kidney: Creatinine15.
- Does not stimulate with slight hemolysis: Cholesterol16.
- One is stimulate on serum calcium level: Prolonged application of tourniquet on arm17.
- Glycolysis done in: Nucleus, Endoplasmic reticulum, Mitochondrion, Cytoplasm, Non of the above
- One of the above not present in Diabetic mellitus coma-Hyperglycemia, Hypercholesterolemia, High number of ketene in urine, Non of the above 19.
- In which substance give blood glucose when hydrolysis: Muscle glycogen, Liver glycogen, Heart glycogen, Unsaturated faT, Triglyceride20.
- Urea is final product of catabolism of: Amino acid, Triglyceride, Cholesterol, polysaccharide21.
- Alkaline phosphates is the important enzyme to detect function in: Liver, Bone, Liver and bone.
 - One of the following anticoagulant used for blood glucose: EDTA, Heparin, Sodium oxalate, Florida Oxalate, Sodium citrate23.
- AST important enzyme to detect abnormality in: Liver disease, Heart disease, Liver and heart
- The diabetic patient is going to comma when blood glucose is?*120 mg/dl*160 mg/dl*Less than 50mg/dl25.
- Amylase value is high in the following disease?*salivary glands*pancreas diseases*All of the previous26.
- One jaundice patient has yellow skin, his billrubin is:*2.5mg/dl*1.2mg/dl*5.0mg/dl27.
- Acute diabetic patient has?*blood sugar more than 150mg/dl*blood sugar more than 180mg/dl*Glucose & Acetone in urine28.
- Diabetic patient has one of the following symptoms?*acidosis*alkalosis*Dryness29.
- Insulin is regulating blood sugar by?*Increase the influx of glucose into cells*activate glycogensis*All the previous30.
- To check the intestinal efficacy the following test is done?*pepsin*lipase*stool fats31.

5

- Comma of diabetic patient shows?*glucose grater than 200mg/dl*glucose less than 200mg/dl*glucose grater than 500mg/dl32.
- Bone matrix can also call?*vascular tissue*fibrous tissue*Osteon
- Serum LDH is elevated in all the following except?*skeletal disease*cardiac/hepatic diseases*renal disease34.
- Elevated Sodium & Chloride is seen in?*shock *diabetic acidosis*Severe dehydration35.
- Which test is better to diagnose chronic bile duct?*total bilirubin*S-GOT*ALP36.
 - With age the renal threshold for glucose?*increase*decrease*does not change37.
 - Causes of high serum bilirubin are?*overload on liver*haemolysis*all of the previous38.
 - One of the following enzymes is affected by hemolysis?*SGOT*SGPT*LDH.
 - HbA1C of diabetic patient is important for?*he has to come fasting*short term follow up*Long term follow up40.
 - For glucose tolerance test?*collect 5 blood samples only*collect 5 urin samples only*collect 5 blood samples + 5 urin samples 41.
- One of the following heart enzymes is measured after 4-8hr of chest pain?*GOT*LDH*CPK. (really phospholo Light effects one of the following?*glucose*urea*billrubin.
 - One of the following is specific diagnostic liver enzyme?*GOT*LDH*GPT.
- One of the following is important before anesthesia?*alkaline phosphates*acidic phosphates*Pseudocholine esterase45.
- Acid phosphate is?*heart enzyme*liver enzyme*Prostatic enzyme.
- In Uric acid estimation?*its affected by carbohydrate meal*no need for fasting*The patient has to come fasting 47.
- All of the following are affected by meal except?*glucose*albumin*Creatininine48.
- Na+ is the main?*intra cellular anion*intra cellular cation —— (K)*extra cellular cation49.
- One of the following electrolytes is affected by hemolisis?*Ca*Mg*k.
- The best kidney function test?*urea*total protein*creatinine clearance51.
- For GTT in adults the dose of glucose is?*50gram*100gram*75gram.
- For GTT in children the dose of glucose is?*30mg*15gram*30gram.
- Random blood glucose gives an idea?*to justify blood glucose*fasting patient*blood glucose in urgent cases 54.
- Exogenous triglyceride is carried on?*VLDL*HDL*Chylomicron.
- Endogenous triglyceride is carried on?*LDL*HDL*VLDL56.
- Harmful cholesterol is carried on?*HDL*VLDL*LDL.
- Useful cholesterol is carried on?*chylomicron*LDL*HDL.
- For lipid investigation patient has to fast?*4-6hr*6-8hr*12-14hr.
- Test Used To Diagnose Obstructive Bile DuctA-Bilirubin, biliverdin, urobilinogen.
- Which of the following is protected from light:-A-bilirubinB-cholesterolC-total protein (TP.)Dbun (blood urea nitrogen)61.
- All of the following can asses the liver function except :- A-AST, ALT, ALP, Creatinine
- Purine Associated WithA-ADENINE, GUANINEC, URIC ACID, RNA

MICROBIOLOGY

- Bacteria can cause pathogenesis to human by:1-Capsullar2-Secret enzymes3-Endogenous toxins4-Exogenous toxins5-All of the above2.
- Function of pili of the bacteria:1- Attachment to the host tissue2- Movement3- Reproduction (multiplication)4- Engulf of food5- All of the above3.
- Bacteria motile gram-rods: Shigella, Bordetela pertusis, Pseudomonas aeruginoea, Yersenia pestis4. Strict aerobe bacteria- Mycobacterium (TB) (470 W
- One is always non motile gram -ve rods:1-Haemophilus Influenza2-Shigella3- E.coli4-Salmonella5-Borditella Pertusis6.
- One is motile gram –ve rods:1- Haemophilus Influenza2- Bacillus anthracis3- Pseudomonas aerogenes4- Vibrio cholerae5- Yersinia Pestis7.
- One is gram +ve oval (cocci):1- Bacillus anthracis2- Meningococci3- Pneumococci8.
- A child diagnosis show scarlet fever the cause is:1-Streptococcus Pyogenes2-Staphylococci
- Xylose lysine Deoxycholate (XLD) is:1- Selective media2- Simple media3- Differential media4-Enriched media5- Enrichment10.
- One is not a Romanowsky stain:1- Fields stain2- Gram stain3- Geimsa stain 4-Leishman stain11.
- Best sterilization of Nutrient media done by:1- Hot air oven2- Autodaving.
- Org. (bacteria) arranged in Chinese litters: 1- Corynebacteria Diphtheria 2- Bacillus anthraces 13. Confirmatory test of streptococcus pneumonia:1- Catalase2- Optochine disc3- Coagulase4- Bile insolubility5-Bacitracin14.
- Gram +ve cocci arranged in groups (clusters):1- Streptococci2- Staphylococci.
- One is always oxidase +ve1- Haemophilus Influenza2- Pseudomonas aurogenase16.
- Gram-v bacteria color :Dark purple, Pale to dark red, Orange
- Bacteria need dark field to detect-T.pallidium (Syphilis)18.
- Citrate test assis: MycobacteriasStaphStreptColistridia sp19.
- Nutrient agar: Basic media 20.
- Disease caused by Pyogen stereptococcus: Scarlet fever.
- Org cause bloody in stool: Shigella sp..
- Z.N stain use for diagnose: Mycobacterium 23.
- Media use for differentiate between L.F and N.L.F: Maconky media24.
- Use for clean slide: Ethyl alcohol, Methyl alcohol.
- The following is ingredient of culture medium: Meat extract, Minral salts, Agar, Peptone, Non of the above, All of the above 26.
- The most source of ATP in cell is: Mitochondria, Cytoplasm, Nucleus, Cell wall27.
- H Ag present in: Pilli, Capsule, Flagella, Cell membrane28.
- Selective and Differential medium of entero pathogen is: Chocolate agar, Blood agar, DCA medium, Meat extract agar, Non of the above 29.

 One of these is prokaryotic cell: Fungi, Bacteria, Entameba histolytica, All of the aboveNon of the above30.

One of these org gram +ve cocci arranged in pairs: Staphylococci, Streptococci, Meningococci,

Entrococci

- Substance used in catalyse reaction: H₂O₂
- The best sample for the culture of children paralysis virus is?*anal swab*blood culture*stool culture33.
- All of the following is true for salmonella except?*motile*produces H2S*oxidase positive34.
- The best media for urine culture is?*blood agar*chocolate agar*CLED agar35.
- The sterilization of autoclave is?*85c for 30min*150c for 30min*121c for 15min.
- Shigella soni colored in maconkey & EMB?*colorless*red*pink.
- All the following bacteria are interobacter except?*E.coli*proteus*Non of the previous3.
- All the following parameters affecting gram staining except?*use H2SO4*add absolute alcohol after washing*Delaying the dryness of the slide39.
- Blood sample is used to diagnose?*C.tetani*C.diphteria*non from them.
- Serious that causes food poisoning?*staph albus*salmonella typhi*Salmonella enteritidis.
- Which of the following causes UTI & INDOL positive?*klebsiella*staphylococci*E.coli.
- One of the following is capsulated bacteria?*streptococci*E.coli*klebsiella Pneumonia43.
- Which of the following culture media is suitable for semi quantitative bacterial count in urine samples: Mc Conkey agar, Blood agar, XLD medium, Mannitol salt agare- CLED medium44.
- The following organisms are lactose fomenters excepta- E. coli, Enterobacter cloacaec- Shigella sonneid, Proteus spp.45.
- All is true about Enterobacteriaceae except :-a-They are hemolytic and sorbitol, Ferments
 Mannitolc- Grow in Methylene blue mediumd- Inhibited growth with 6.5 % NaCl and/or at
 temperature46.
- All are true of campylobacter jejuni or Which of the following statements about campylobacter is false:-a-Gram negative curved bacilli, Slow growth, Grow on XLD medium, Arranged in pairs
- Beta hemolysis is enhanced when group B Streptococci is streaked at an angle in blood agar plate with: Streptococcib-Staph aureusc-Micrococcusd-Streptococcus epiedermidise-Corynebacterim diphteriae48.
- All statements are true about proteus mirabilis and Proteus vulgaris except -Oxidase negative & liquefies gelatin: Exhibits swarming on BAP and Mc Conkey's agarb-Urease positivec-KCN and N2S positived- Positive to INDOLE test49.
- Klebsiella pneumonia- Capsulated50.
- Some organisms are to said to be pathogenic if they are containing the following features :-A-coagulaseB-catalaseC-sugarD-antibodies51.
- Sterilization is best done by- 121c 15 PSI for 15-20 minutes.
- Organism Soluble In Bile:-A-staphB-streptococciC-Pneumococci (streptococcus pneumonia)D- Haemophilous influenzae53.

- Thayer-martin media is the choice for the isolation of the following organism: Pseudomonas AeroginosaB- Haemophilus influenzaeC- Nisseria gonorrhoea
- Confirmatory test for Strept. Pneumoniae: **Optochin sensitivity disc**B- Bacitracin disc sensitivityC- Bile solubilityD- Catalase test55.
- Specimen suitable for microfilaria-TISSUE, BLOOD, FLUID56.
- Which of the following organisms is an anaerobic bacterium: -A- Clostiridium spp.B-HaemophilusC- E. ColiD- Yersinia enterocolitica
- Nutrient agar is :-A- Selective mediaB-Differential mediaC-Special mediaD-Basic medium58.
- The Following Organisms Are Encapsulated Except :-A- Pseudomonas aeroginosaB- E. ColiC-Haemophilous influenzaeD- Streptococcus pneumoniae
- Vi Ag is seen in :-A- CAPSULE, PILIC-SPORED-FLAGELLA60.
- All are true about enterococci except: (Strept. Faecalis)A-have carbohydrate antigen of group
 d streptococci, positive aesculin hydrolysisC-grow in the presence of bile saltsD- Do not grow in
 the presence of 6.5 % Nacl nor at 45 c
- Significant bacteruria, puria, and alkaline urine probably indicate urinary tract infection due to: Staphylococcus epidermidis- E. Coli- **Proteus vulgaris-** Pseudomonas aerginosa-Enterococcus Faecalis62.
- Streptococci responsible for the majority of human infections are:-**Group A**, beta-haemolytic streptococci, bacitracin-s and camp (-), all of theseE-none of these
- To differentiate between nisseria gonorrhoea and nisseria meningitidis: A-fermentation of dextrose and lactoseB- Fermentation of dextrose and maltoseC-fermentation of maltose and lactose, Fermentation of maltose and sucrose.
- Blood culture is indicated in the following bacterial diseases except- meningitisB-endocarditisC-GastroenteritisD-pyelonephritisE-pneumonia65.
- Which of the following statements about campylobacter jejuni is falseA-gram negative curved bacilliB- Arranged in pairs (see-gull)C-slow growthD-Grows on XLD mediumE-incubation temperature at 42 c66.
- The invasiveness of streptococcus pneumoniae is due to the production of:A-haemolsinsB-endotoxinsC-extotoxinsD- **Polysaccharide capsule**
- Agar is characterized by all the following except?*freezing point is 42c & melting point is 100c*nutritive*un-nutritive

6 lucose 1 - after Standing / w/o contribugation
IVF GIT - for poor 6 hicos+ Absorption / Variation of Ghicose Absorption.
Creatinine Clearance = wrine sample 15 12 hrs.
Ca V = EDIS
Ustatistical SD = CL - mean = 100 (99,100,101,102)/98,97,95,96/105,106,107,108)
Product of anino acid catabolismi: Urea 200
HbA = major in adult.
Protime = I (II), X, VII
Folic Acid Aremia: Macro cytic, megaloblastic arenia
forkilo cytosis = shape of RBC
He molytic America - 1 reducell destruction
Fosinophil = parasite d'allergie reaction
Chotting Factor more on tissue = !
Fosinophil = parasite d'allergie reaction Chotting Factor more on tissue = ? Bacteraides = 90 co ceobacilli
Dest for culture = mid stream wrine
auture media for TB = Lowenstein Jensey Agar
auture media for TB = Lowenstein Jensen toar Strepto cocci @ of micrococci Detatalage Strepto cocci @ of phylococci)
-best antibiotic for Streptococci = Penicillin
Microscope used for Granstaining Bright, Partield, Flourisant, Electron.
log phase = Increased growth rate of bootenia
Gonorrhea Gonococcalnifiction - Genital, skin, blood, nasal